Resilient Supply Chains for Mission-Driven Organizations

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Abstract

Food banks, relief agencies, social enterprises and other mission-driven organisations depend on supply chains to deliver goods and services to the people they serve. When those chains are disrupted, the consequences fall on people who often have few alternatives. This conceptual paper develops a framework for supply chain resilience in mission-driven organisations. It builds on Dissanayake and Pal's case study of three Swedish nonprofit organisations operating circular used clothing supply chains, which identifies seven microfoundations of dynamic capabilities emerging across employee, managerial, organisational and supply chain levels, and on Afif and colleagues' multiple case study of food bank supply chains during COVID-19, which distinguishes reactive capabilities in the short term from proactive capabilities over the medium and long term. These studies are connected to research on supply chain vulnerability, resilience as a concept, the balance between vulnerabilities and capabilities, humanitarian logistics and the necessary antecedents of resilience. The paper proposes a mission-anchored resilience framework in which capabilities are built at several levels, sequenced over time and checked against the organisation's purpose. Six propositions address collaboration and responsiveness, converting improvisation into preparation, managerial capability, workforce variability, mission alignment and partner development. No original empirical data are presented.

Keywords: supply chain resilience; mission-driven organisations; dynamic capabilities; humanitarian logistics; nonprofit operations

Introduction

Mission-driven organisations move physical goods more often than is sometimes recognised. Food banks receive, store and distribute food. Relief agencies procure and deliver shelter materials, water and medical supplies. Social enterprises collect, sort and resell used goods. Community organisations distribute school supplies, hygiene kits and household items. In each case, a supply chain connects sources of goods to the people who need them. When that chain fails, the organisation's mission fails with it.

Disruptions are not rare. Demand can rise suddenly when an economic shock or disaster strikes. Supplies can fall when the usual sources dry up. Storage and transport can become constrained, and the people who run operations can become unavailable. Mission-driven organisations often face these pressures with limited reserves, uncertain inflows of goods and a workforce that combines paid staff with volunteers. The question of how they can build supply chains that withstand and recover from disruption is therefore practical and urgent.

The supply chain resilience literature has developed largely in commercial settings, where the purpose of resilience is to protect revenue and competitive position. Mission-driven organisations share many of the same operational problems but pursue different ends. Their measure of success is whether people receive what they need, and their choices about efficiency, redundancy and partnership are constrained by their purpose. A framework for resilience in these organisations must therefore attend to both operational capability and mission.

This paper draws on two recent empirical studies. Dissanayake and Pal (2025) examined how three of Sweden's largest nonprofit operators of used clothing circular supply chains transformed their capabilities in response to impending legislation and growing competition from for-profit entities. Using a case study approach guided by the dynamic capability view, they identify seven microfoundations of dynamic capabilities across four levels: employee, managerial, organisational and supply chain. Afif et al. (2026) examined food bank supply chains during COVID-19 through a qualitative multiple case study. According to the publisher's abstract, they report that stakeholders deployed reactive capabilities in the short term and proactive capabilities over the medium and long term, and they advance three research propositions on how capabilities, structural conditions and contextual factors interact to foster network-level resilience.

The paper makes three contributions. First, it brings these two studies together with established research on supply chain resilience and humanitarian logistics to develop a mission-anchored resilience framework. Second, it argues that resilience in mission-driven organisations should be assessed not only by whether operations recover but by whether recovery preserves the organisation's purpose. Third, it develops six propositions suitable for empirical testing.

The analysis relies on verified references selected for relevance rather than a systematic review. Dissanayake and Pal (2025) was read in full from an open-access copy of the published version. Claims about Afif et al. (2026) and about several supporting works are limited to their verified abstracts and bibliographic records, because full texts could not be retrieved during preparation. No result is attributed to any work beyond what its verified text supports. Where this paper uses the language of influence or effect, it refers to proposed relationships to be tested, not to established findings.

Literature Review

Vulnerability and the meaning of resilience

Christopher and Peck (2004) frame supply chain vulnerability as an issue of growing significance in uncertain and turbulent markets. Their abstract observes that supply chains become more complex as a result of global sourcing and the continued trend towards leaner operations, and that supply chain risk increases as a result. The challenge, they argue, is to manage and mitigate that risk through creating more resilient supply chains. The point about leanness is especially relevant to mission-driven organisations, which are often encouraged to minimise overheads and inventory. Leanness can reduce cost, but it can also remove the buffers that allow an organisation to absorb shocks.

Ponomarov and Holcomb (2009) note that resilience was a relatively undefined concept in risk management and supply chain management. Through an integrative literature review drawing on several disciplines, including developmental psychology and ecosystems, they develop a conceptual model. Their abstract describes resilient supply chains as incorporating event readiness, being capable of providing an efficient response and often being capable of recovering to their original state or even better. This three-part view, covering readiness, response and recovery, is useful because it reminds organisations that resilience is built before disruptions as well as demonstrated during them.

Vulnerabilities and capabilities in balance

Pettit, Fiksel and Croxton (2010) present a supply chain resilience framework based on existing literature and refined through a focus group methodology. Their abstract reports that resilience can be assessed in terms of two dimensions, vulnerabilities and capabilities, and defines a Zone of Resilience as the desired balance between them. They identify seven vulnerability factors composed of 40 specific attributes and 14 capability factors from 71 attributes. Although the framework was developed for businesses and proposes that firms in the Zone of Resilience will be most profitable in the long term, its central logic transfers to mission-driven settings. An organisation can be over-exposed, with vulnerabilities its capabilities cannot match, or over-invested, with capabilities that consume resources beyond what its vulnerabilities justify. For organisations with limited resources, the idea of balance is particularly important.

Humanitarian logistics

Humanitarian logistics offers the most developed body of work on supply chains in mission-driven settings. Van Wassenhove (2006) argues that private sector logistics can and should be applied to improve disaster logistics, but that the private sector must first understand the core capabilities of humanitarian logistics. His abstract outlines strategies for better preparedness and the need for supply chains to be agile, adaptable and aligned, describing this as a core competency of many humanitarian organisations involved in disaster relief. It also makes the case for closer collaboration between humanitarian organisations, businesses and academics.

Kovács and Spens (2007) review academic and practitioner literature on logistics in disaster relief and develop a framework distinguishing actors, phases and logistical processes. Their abstract emphasises the unique characteristics of humanitarian logistics while recognising its need to learn from business logistics, and notes that the framework is conceptual and requires empirical support. The distinction between phases is helpful for thinking about resilience over time, since preparation, response and recovery require different activities and capabilities.

Necessary antecedents of resilience

Nikookar et al. (2025) offer a recent and methodologically distinctive contribution. According to their abstract, grounded in dynamic capabilities theory, they hypothesised that supply chain visibility, responsiveness, flexibility and collaboration are necessary antecedents of resilience and tested this using Necessary Condition Analysis on survey data from 479 manufacturing firms in Australia. The results indicate that only responsiveness and collaboration were necessary antecedents. They propose a two-tiered maturity model distinguishing necessary capabilities from contributory ones and provide guidance on how limited organisational resources can be deployed most efficiently to handle disruptions.

The distinction between necessary and contributory capabilities is valuable for mission-driven organisations, which rarely have resources to build every capability at once. If some capabilities are necessary, in the sense that resilience cannot be achieved without them, those capabilities deserve priority. The evidence comes from manufacturing firms in one country, however, and its application to mission-driven settings is a matter for testing.

Capabilities in nonprofit supply chains

Dissanayake and Pal (2025) provide direct evidence on capabilities in nonprofit supply chains. Their study concerns three Swedish nonprofit organisations operating used clothing circular supply chains under pressure from impending extended producer responsibility legislation and from for-profit entities, including commercial recyclers and fashion brands. They identify three microfoundations of sensing capabilities (internal monitoring, environmental scanning and stakeholder engagement), two of seizing capabilities (operational agility and supply chain partner development) and two of reconfiguring capabilities (co-evolving and strategic alignment).

Several findings are relevant to resilience. The authors report that the organisations had shifted towards profit-oriented models, enhancing reverse logistics through technology, improving process efficiency and diversifying product portfolios. They also report that all three organisations emphasised strategic alignment, ensuring that efforts to increase profit did not compromise the social sustainability of their supply chains. They describe managerial-level dynamic capabilities as the most critical in the organisations' operational context, while noting that managerial capabilities were shaped by employee-level capabilities such as problem detection and feedback. They also identify challenges: middle management in one organisation showed some resistance to change, collaborations with municipalities using unemployed or volunteer labour raised issues about skill levels and deliverables, and partnerships with commercial recyclers were hindered by demands for sorted feedstock and the lack of an upskilled sorting workforce. The authors acknowledge that their focus on three cases may limit the generalisability of their findings.

Resilience across time in food bank supply chains

Afif et al. (2026) study food bank supply chains during COVID-19. According to the publisher's abstract, the pandemic exacerbated food insecurity and revealed structural vulnerabilities in these chains. Using focus groups, semi-structured interviews and field observations, the authors analyse how resilience emerged and evolved across short-, medium- and long-term horizons. In the short term, stakeholders deployed reactive capabilities, including agility, flexibility, coordination and adaptability, to manage disruptions such as supply volatility, storage constraints and surging demand. Over the medium and long term, proactive capabilities, including enhanced visibility, redundancy and strengthened collaboration, supported stabilisation and transformation. The authors identify a structured repertoire of resilience-building interventions linking operational practices to the capabilities that sustain them, and they describe their contribution as a transferable framework for network-level resilience in nonprofit supply chains.

Conceptual Framework and Propositions

Mission-anchored resilience

The mission-anchored resilience framework proposes that resilience in mission-driven supply chains rests on three elements.

Layered capabilities. Following Dissanayake and Pal (2025), resilience capabilities arise at several levels: among employees and volunteers who detect problems and adapt routines, among managers who make decisions and drive change, at the organisational level in structures and systems, and at the supply chain level in relationships with partners. Capabilities at one level depend on capabilities at others.

Temporal sequencing. Following Afif et al. (2026), Ponomarov and Holcomb (2009) and Kovács and Spens (2007), resilience is built and exercised over time. Reactive capabilities allow organisations to absorb immediate disruption. Proactive capabilities, built during calmer periods and in the aftermath of disruption, prepare organisations for the next shock.

Mission anchoring. Mission-driven organisations must judge their resilience by whether they continue to serve their purpose. Dissanayake and Pal's (2025) finding that the organisations they studied emphasised strategic alignment, so that profit did not compromise social sustainability, illustrates the need for a mission check on operational decisions. Resilience that preserves operations while abandoning the people the organisation exists to serve is not resilience in the sense that matters.

The framework also borrows the idea of balance from Pettit et al. (2010). Mission-driven organisations should seek capabilities proportionate to their vulnerabilities, recognising that over-investment in resilience can divert resources from service as surely as under-investment can expose the organisation to failure.

Proposition 1: Collaboration and responsiveness as priorities

Nikookar et al. (2025) report that responsiveness and collaboration were necessary antecedents of supply chain resilience among manufacturing firms, while visibility and flexibility were not. Afif et al. (2026) report that strengthened collaboration was among the proactive capabilities supporting stabilisation and transformation in food bank supply chains. If these findings extend to mission-driven settings, organisations with limited resources may gain most by prioritising collaboration and responsiveness.

Proposition 1. In mission-driven supply chains, low levels of supply chain collaboration and responsiveness will constrain resilience regardless of the level of other capabilities, such that high resilience will rarely be observed where either is low.

Proposition 2: Converting improvisation into preparation

Afif et al. (2026) separate the reactive capabilities used early in a crisis from the proactive ones built over the medium and long term. During a crisis, organisations improvise. Whether those improvisations become lasting capabilities depends on whether the organisation reviews what worked and builds it into routines, relationships and infrastructure.

Proposition 2. Mission-driven organisations that conduct structured reviews after disruptions and convert successful improvisations into standing arrangements will stabilise more quickly in subsequent disruptions than organisations that return to prior practices without such review.

Proposition 3: Managerial capability as a hub

Dissanayake and Pal (2025) found managerial-level capabilities to be the most important in their cases, while noting that managers' capabilities were shaped by employees' problem detection

and feedback. This suggests that managers act as a hub through which capabilities at other levels are connected.

Proposition 3. The association between employee- and volunteer-level problem detection and organisational adaptation after disruption will be stronger in mission-driven organisations where managers have established channels for receiving and acting on frontline feedback.

Proposition 4: Workforce variability and training

Mission-driven organisations often rely on volunteers and participants in work-integration programmes. Dissanayake and Pal (2025) report challenges in partnerships using unemployed or volunteer labour, including issues of skill levels and deliverables, and they suggest that reskilling and upskilling could benefit both workers and the organisation. A variable workforce can provide surge capacity but may also limit the reliability of operations if skills are not maintained.

Proposition 4. In mission-driven supply chains that rely substantially on volunteers or work-integration participants, investment in role-specific training will be positively associated with operational reliability during disruptions.

Proposition 5: Mission alignment as a safeguard

Christopher and Peck (2004) associate leaner operations with increased supply chain risk. Dissanayake and Pal (2025) report that the organisations they studied adopted profit-oriented operational strategies while emphasising strategic alignment with social sustainability. Mission-driven organisations face pressure to improve efficiency, and efficiency gains can be valuable. The framework proposes that efficiency measures adopted without an explicit check against mission and resilience may reduce buffers and narrow the organisation’s focus in ways that make it more vulnerable and less faithful to its purpose.

Proposition 5. Mission-driven organisations that require an explicit assessment of mission and resilience effects before adopting efficiency measures will experience fewer service interruptions to priority groups during disruptions than organisations that adopt efficiency measures without such assessment.

Proposition 6: Partner development and goal alignment

Dissanayake and Pal (2025) identify supply chain partner development as a seizing capability but report challenges arising from conflicting interests and divergent goals among partners. Van Wassenhove (2006) makes the case for closer collaboration across sectors. Partnerships can extend an organisation’s capacity, but partners with different goals may withdraw or impose conditions when circumstances change.

Proposition 6. Supply chain partnerships between mission-driven organisations and other actors will be more likely to continue through disruptions when the partners have explicitly agreed on

shared goals and on how conflicts of interest will be handled than when such agreement is absent.

Discussion

Resilience defined by purpose

The central claim of the framework is that resilience in mission-driven organisations should be assessed by whether the organisation continues to serve its purpose. This differs from commercial definitions in emphasis rather than kind. Pettit et al. (2010) link their Zone of Resilience to long-term profitability, and Nikookar et al. (2025) frame their maturity model around using scarce resources efficiently when disruptions occur. For mission-driven organisations, the equivalent outcome is continuity of service to the people they exist to help, particularly those with the fewest alternatives.

This emphasis has practical consequences. A food bank that maintains operations during a crisis but can no longer reach people without transport has preserved its supply chain but not its mission. An organisation that becomes more efficient by concentrating on easily served groups may improve its metrics while weakening its purpose. Mission anchoring asks leaders to examine resilience from the perspective of the people served.

Leanness and redundancy

Mission-driven organisations are often encouraged to keep costs low, and low overheads can be a sign of good stewardship. Christopher and Peck (2004) note, however, that leaner operations increase supply chain risk, and Afif et al. (2026) identify redundancy among the proactive capabilities that supported stabilisation in food bank chains. There is a genuine tension here. Redundant storage, spare transport capacity and reserve stocks cost money that could otherwise fund service. The idea of balance from Pettit et al. (2010) offers a way to frame the decision: redundancy should be proportionate to the vulnerabilities the organisation faces, and leaders should be able to explain to boards and partners why some apparent inefficiency is a deliberate investment in resilience.

Learning from commercial and humanitarian logistics

Van Wassenhove (2006) argues for cross-learning between the private and humanitarian sectors, and Kovács and Spens (2007) recognise the need for humanitarian logistics to learn from business logistics. Dissanayake and Pal (2025) report that the nonprofit organisations they studied were adopting elements of profit-oriented supply chains, including technology for reverse logistics and process improvements. Mission-driven organisations can benefit from commercial practices in visibility, inventory management and coordination. The mission anchor is a reminder that such practices should be adopted to serve the mission, not to displace it.

The role of networks

Afif et al. (2026) emphasise network-level resilience, and Nikookar et al. (2025) identify collaboration as a necessary antecedent. Mission-driven organisations rarely operate alone. Food banks work with local agencies, relief organisations coordinate with governments and other agencies, and social enterprises depend on collection partners and buyers. Resilience may therefore depend as much on relationships across a network as on the capabilities of any single organisation. This has implications for how resilience is assessed and supported. An organisation may be well prepared internally but vulnerable because a key partner is not.

The contribution of frontline knowledge

Dissanayake and Pal's (2025) finding that employee-level capabilities in problem detection and feedback were valuable to managers points to an underused resource. Staff and volunteers who handle goods, speak to clients and run distribution often see problems before managers do. Building channels through which this knowledge reaches decision-makers may be among the least costly ways to strengthen resilience. It also respects the knowledge of people who are sometimes treated as temporary or peripheral to operations.

Visibility: contributory or necessary?

The evidence on visibility points in two directions, and the tension is instructive. Dissanayake and Pal (2025) describe how one organisation used technology-driven reverse logistics, including QR codes and mobile apps, to gather information from diverse collection points, and how another developed a warehouse management system able to handle individual garments. They link such tools to better monitoring, visibility and information reliability. Afif et al. (2026) list enhanced visibility among the proactive capabilities that supported stabilisation and transformation in food bank chains. Nikookar et al. (2025), by contrast, report that visibility was not a necessary antecedent of resilience among the manufacturing firms they studied, although it may still contribute.

These findings need not conflict. A capability can be valuable without being necessary in the strict sense used in Necessary Condition Analysis. For mission-driven organisations, the practical question is sequencing. If collaboration and responsiveness are necessary, they may deserve attention first, with investments in visibility following once those foundations are in place. Where visibility tools are inexpensive and directly support collaboration, for example by allowing partners to see shared stock levels, the two may be pursued together. The framework treats this as an open empirical question rather than a settled priority.

Limits of transfer

Several of the works on which this paper draws were developed in commercial settings, and the two focal studies concern particular contexts: used clothing supply chains in Sweden and food bank supply chains during COVID-19. The framework's claims about mission-driven

organisations generally are therefore theoretical. Relief supply chains operating in conflict zones, for example, face constraints that neither focal study addresses. The propositions are stated so that they can be tested in different settings and revised where they do not hold.

Practical Implications for Nonprofit and NGO Leaders

The framework suggests several starting points for leaders. These are design suggestions consistent with the argument, not evidence-based prescriptions.

First, map vulnerabilities and capabilities together. Leaders can list the disruptions their supply chain is most exposed to, such as sudden demand increases, loss of key sources, storage or transport constraints and staff unavailability, and set these against the capabilities the organisation has to respond. Gaps in either direction deserve attention.

Second, prioritise collaboration and responsiveness. If resources are limited, strengthening relationships with key partners and the ability to respond quickly to changes in supply and demand may be the most valuable starting points.

Third, review disruptions after they occur. A structured review after each significant disruption can identify which improvisations worked and how they could become standing arrangements, such as pre-agreed partner support, reserve storage or flexible staffing plans.

Fourth, build channels for frontline knowledge. Staff and volunteers who run daily operations can provide early warning of problems. Regular, simple opportunities for them to report issues and suggest improvements may strengthen adaptation.

Fifth, invest in role-specific training for variable workforces. Where operations depend on volunteers or work-integration participants, brief and practical training for critical roles may improve reliability when conditions are difficult.

Sixth, check efficiency measures against mission and resilience. Before reducing inventory, consolidating sites or narrowing services, leaders can ask how the change would affect the organisation’s ability to absorb disruption and to reach the people with the fewest alternatives.

Seventh, agree goals with partners explicitly. Partnerships are more likely to hold when partners have discussed what each seeks from the relationship and how conflicts will be handled, rather than leaving these questions until a disruption forces them.

Eighth, explain resilience investments to boards and stakeholders. Some resilience measures look like inefficiency when viewed in isolation. Explaining their purpose in advance can help secure support for them.

Ninth, look beyond the organisation’s own walls. Because resilience may depend on the network as much as on any single organisation, leaders can ask which partners are critical to their supply

chain, how prepared those partners are and what mutual support could be agreed in advance. Shared contingency plans, even brief ones, may help a network respond as a whole rather than as separate organisations competing for the same scarce supplies, storage and transport.

Limitations and Future Research

This paper is conceptual and presents no original empirical data. Its propositions are theoretical and require testing.

The focal evidence has limits. Dissanayake and Pal (2025) studied three nonprofit organisations in one sector and one country, and the authors note that this may limit generalisability. Claims about Afif et al. (2026) rely on the publisher's abstract because the full text could not be retrieved during preparation. Several supporting works, including Christopher and Peck (2004), Ponomarov and Holcomb (2009), Pettit et al. (2010) and Nikookar et al. (2025), were developed in commercial contexts and are cited at the level of their verified abstracts.

The framework does not address every relevant factor. Public policy, the availability of resources, the characteristics of local markets and the severity of particular disruptions are all likely to affect resilience. The framework concentrates on factors within an organisation's influence.

Resilience is also difficult to measure. Commercial studies can draw on revenue, cost or delivery performance, while mission-driven organisations may need measures of continuity of service to priority groups, waiting times or unmet requests. Such measures are often not collected consistently, and their absence may limit both research and practice.

The concept of mission anchoring requires further development. Mission statements are often broad, and organisations may disagree internally about what their mission requires in a crisis. Research is needed on how organisations interpret their mission when making resilience decisions.

Future research could test the propositions in several ways. Studies using Necessary Condition Analysis, following Nikookar et al. (2025), could examine whether collaboration and responsiveness are necessary conditions for resilience in mission-driven supply chains. Longitudinal case studies could examine whether structured post-disruption reviews are associated with faster stabilisation in later disruptions. Comparative research could examine how volunteer-reliant and staff-reliant operations differ in reliability during disruptions and whether training moderates the difference. Research could also examine how partnerships between mission-driven organisations and commercial actors handle conflicts of interest during disruptions.

Conclusion

Mission-driven organisations depend on supply chains to fulfil their purpose, and disruptions to those chains fall hardest on the people they serve. This paper has proposed a mission-anchored resilience framework in which capabilities are built at several levels, sequenced over time and checked against the organisation's purpose. Drawing on Dissanayake and Pal's (2025) evidence on dynamic capabilities in nonprofit circular supply chains, Afif et al.'s (2026) account of reactive and proactive capabilities in food bank supply chains and established research on supply chain resilience and humanitarian logistics, it has advanced six testable propositions. The central claim is that resilience for these organisations means more than recovering operations. It means continuing to reach the people the organisation exists to serve.

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